

WHAT IS CLAIMED IS;

1. A lip-type seal with which an outer periphery of a shaft supported by a predetermined housing is sealed, the
5 lip-type seal comprising:

a seal ring made of an elastic material so as to define an annular fitted part and a lip part, the annular fitted part being fitted to a hole of the housing, the lip part extending from the fitted part inwardly in a radial direction in the shape
10 of a substantially conical ring and being brought into contact with the shaft; and

a support ring including an annular joint part joined to the fitted part and an annular supporting part, the annular supporting part defining a hole through which the shaft passes,
15 extending from a side of the joint part to a halfway area of the lip part, and supporting the lip part from an inside in the radial direction,

wherein the lip part is tapered in cross section from an area from which noncontact with the supporting part starts
20 toward an end thereof.

2. The lip-type seal as set forth in Claim 1, wherein the lip part is formed so that the value $\alpha = T_0/T_1$ falls within 0.3 to 0.7 where T_1 is a thickness of the area from which noncontact
25 with the supporting part of the support ring starts, and T_0 is a thickness of the end.

3. The lip-type seal as set forth in Claim 1, wherein the value $\beta = (D1 - D0) / D1$ falls within 0.03 to 0.15 where D0 is an inner diameter of the end of the lip part, and D1 is an outer diameter of the shaft.

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4. The lip-type seal as set forth in Claim 1, wherein the lip part is formed so that the value $\alpha = T0 / T1$ falls within 0.3 to 0.7 where T1 is a thickness of the area from which noncontact with the supporting part of the support ring starts, and T0 is a thickness of the end, and the value $\beta = (D1 - D0) / D1$ falls within 0.03 to 0.15 where D0 is an inner diameter of the end of the lip part, and D1 is an outer diameter of the shaft.

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5. The lip-type seal as set forth in Claim 1, wherein the supporting part of the support ring is bent so as to be convex toward a side of the lip part.

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6. The lip-type seal as set forth in Claim 1, wherein the lip part of the seal ring is 85 degrees to 98 degrees in material hardness according to JIS (Duro-A) hardness.

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